

F1G.

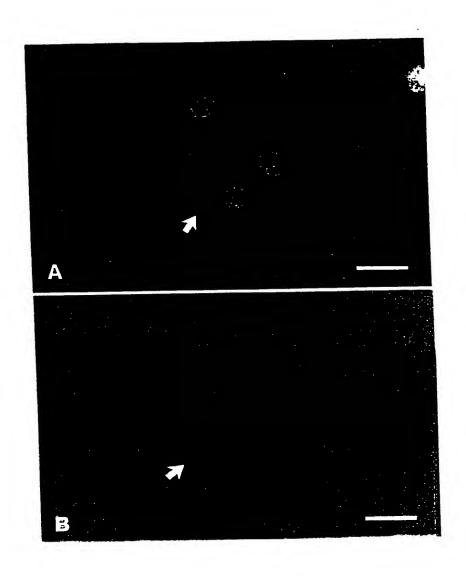
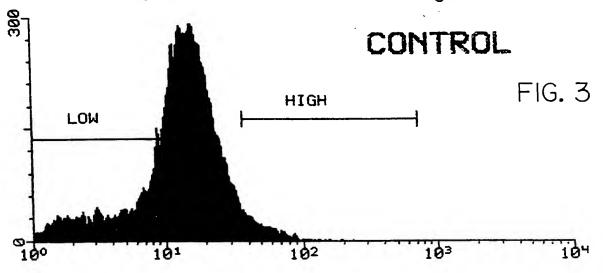
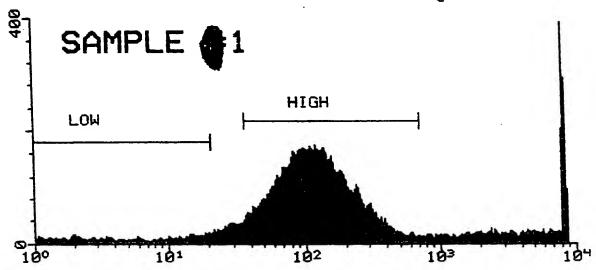


FIG. 2

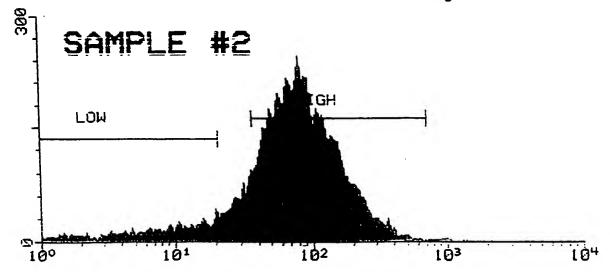


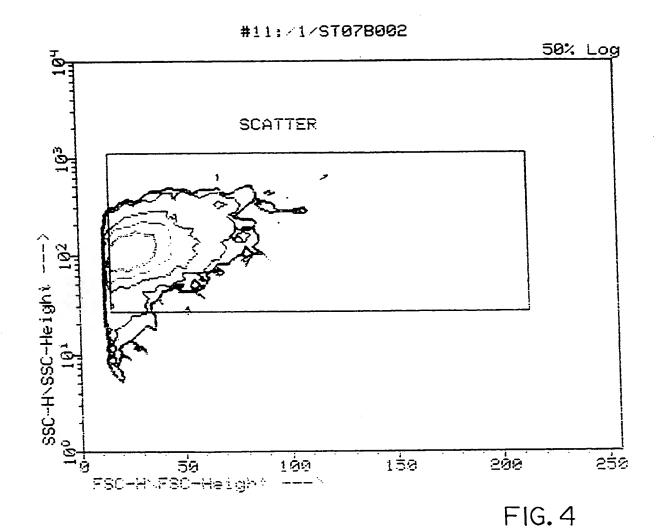


#11:/1/ST07B001\FL1-H\FL1-Height



#11:/1/ST07B002\FL1-H\FL1-Height





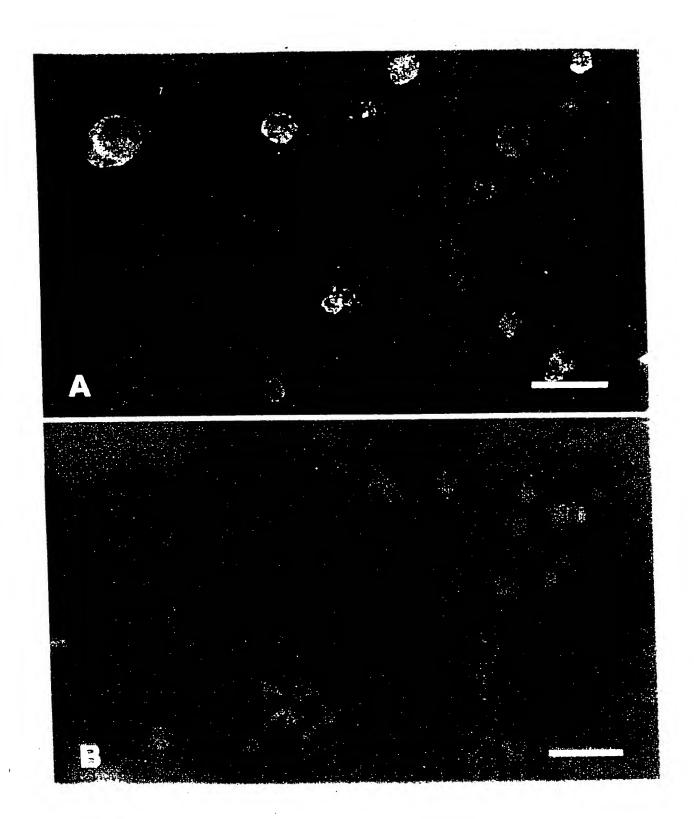


FIG. 5

ANGLE OF INJECTION DETERMINES MYOBLAST DISTRIBUTION A>B>C>D

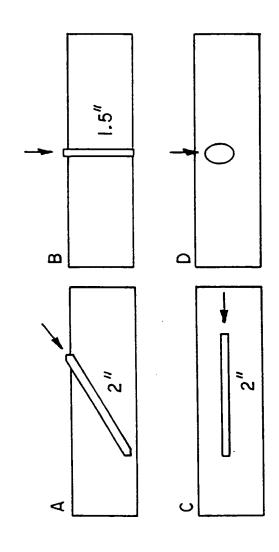


FIG. 6

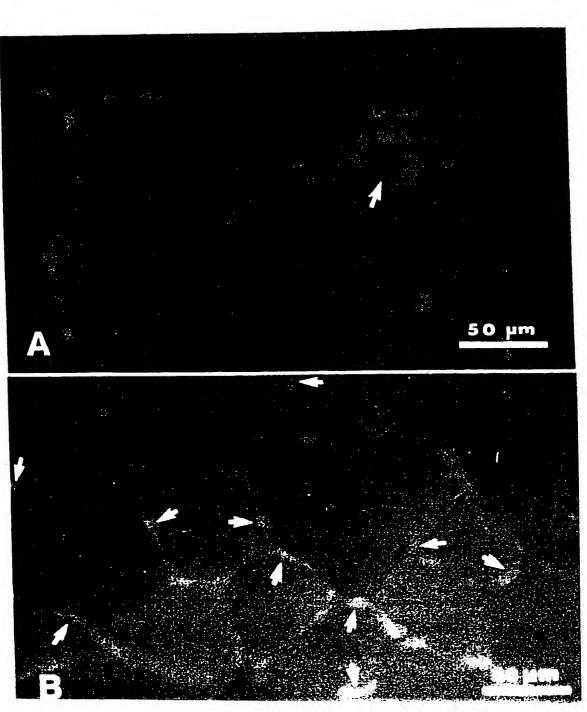
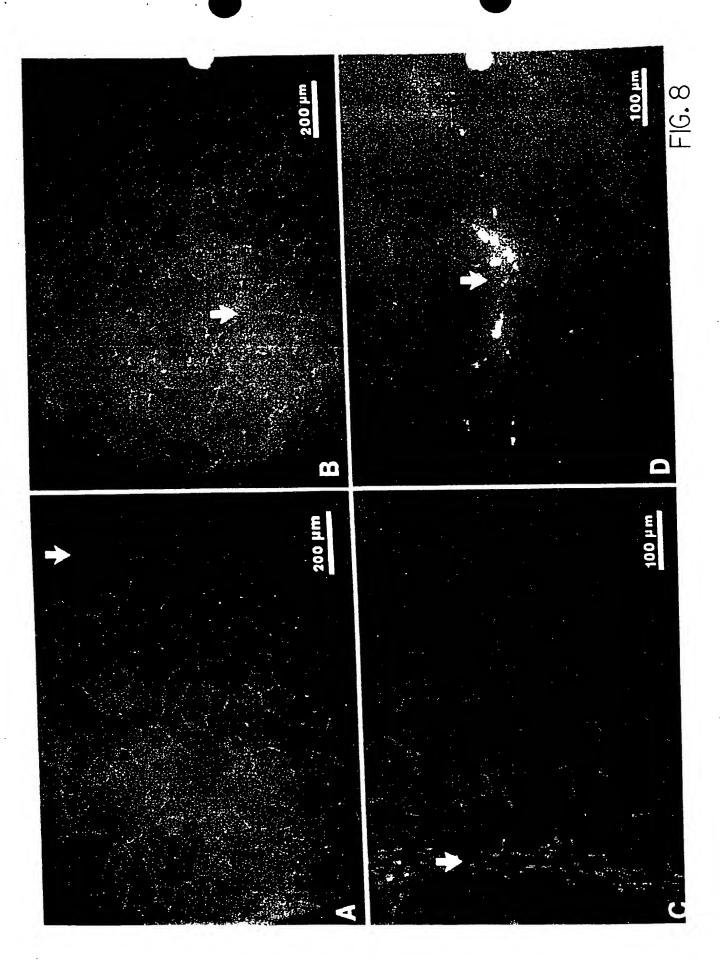


FIG. 7



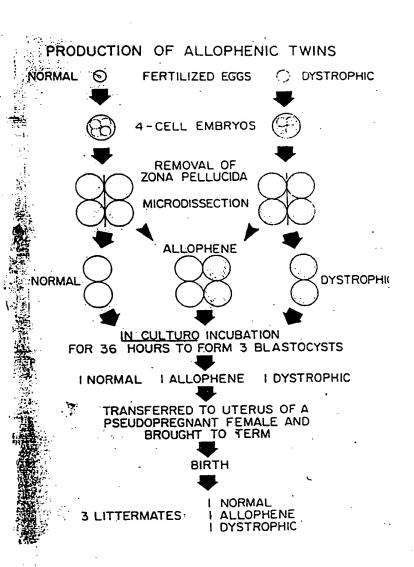
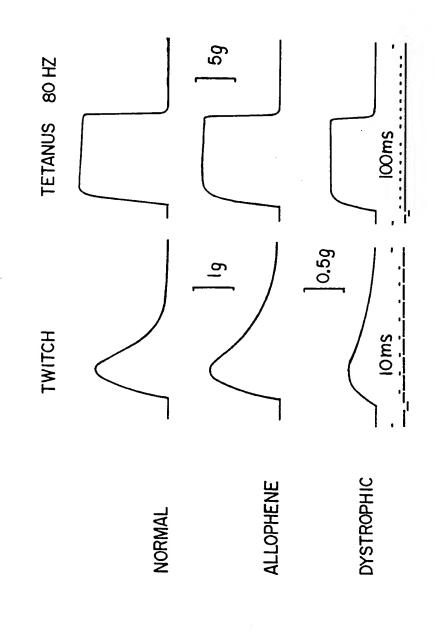


FIG.9



FIG. 10



F1G. -

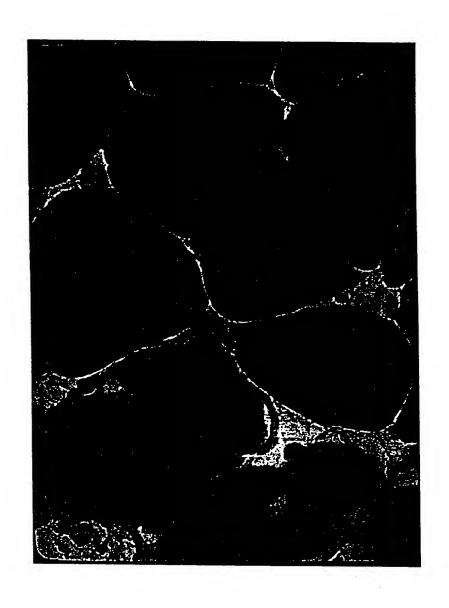


FIG. 12

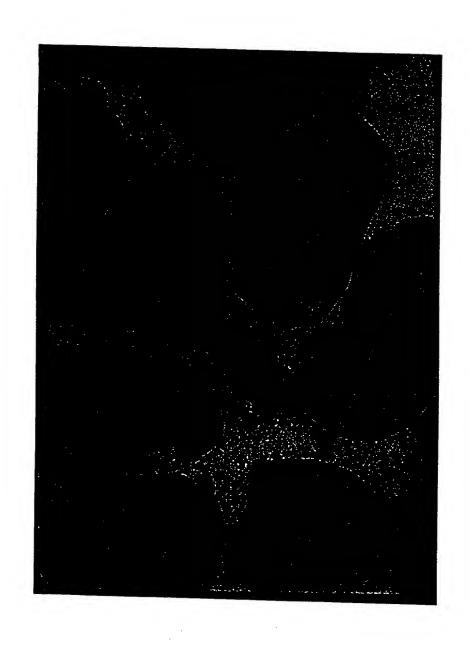
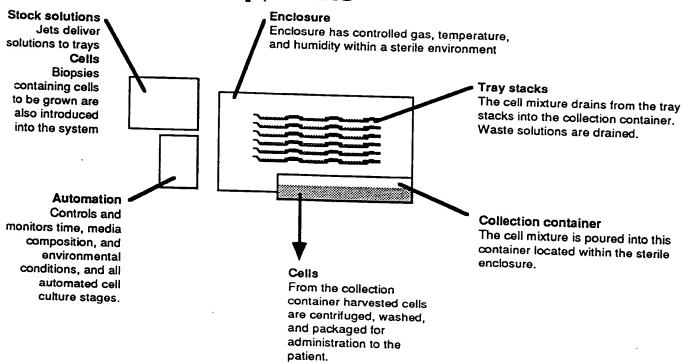


FIG. 13

# Instrument components



### **Culture trays**

### Top view Jets Inject solution onto culture plates Drainage Solutions from culture plates are either collected or discarded. Culture plate Each plate is 1800 cm<sup>2</sup>. Each Flow duct Keeps the solution level even holds cells, media, and/or rinse throughout all the culture plates. solutions. Made of stainless Also allows soutions to flow steel that is sterilized and is between culture plates when the coated with collagen to allow Side view entire pan tilts. cells to adhere. Jets Inject gases and solution onto culture plates

#### Tray stacks

Composed of many culture plates interconnected by flow ducts. Trays are stacked but do not touch.

## **Automated actions**



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Fill Jets fill trays with solution



Wash and drain Tray stacks tilt to allow solutions to drain during washing or media changes. Jets add fresh solution to trays while wash solutions are drained and discarded.

Detatched cell mixtures are collected.



Drain and collect Tray stacks tilt to vertical to maximize detatched cell collection during harvest.

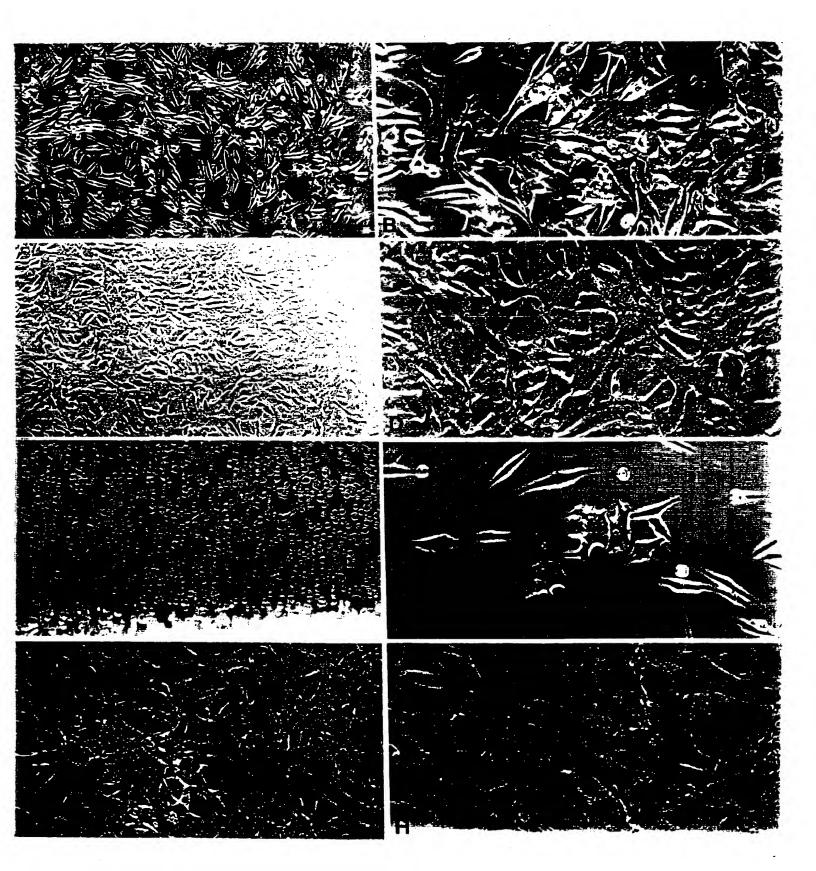
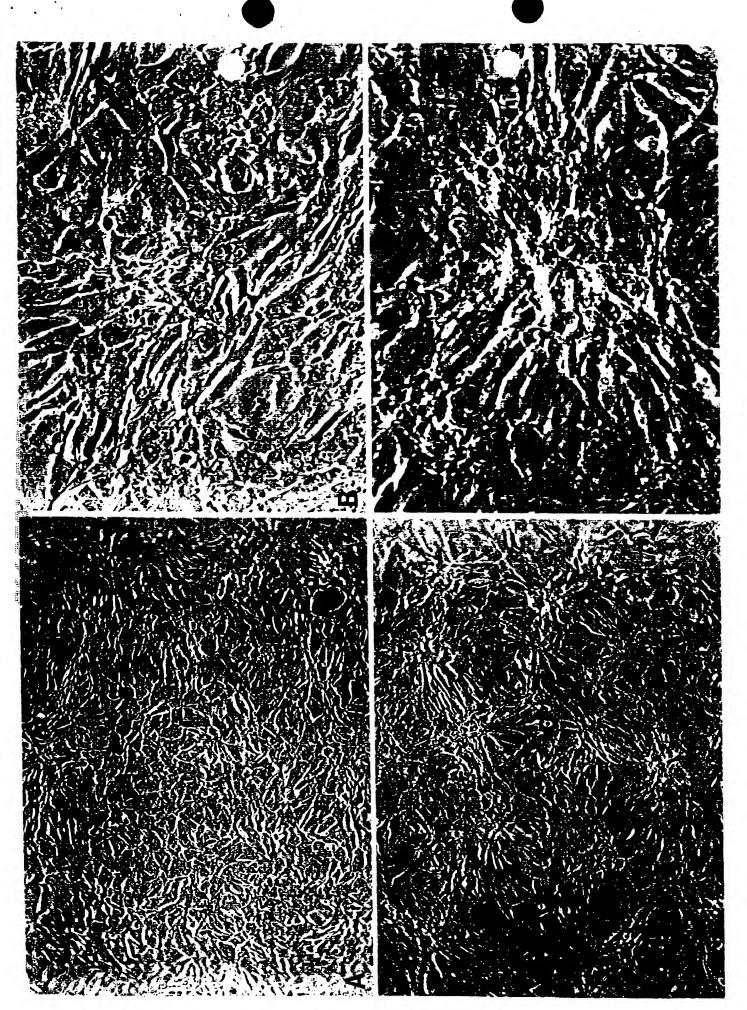


FIG.16



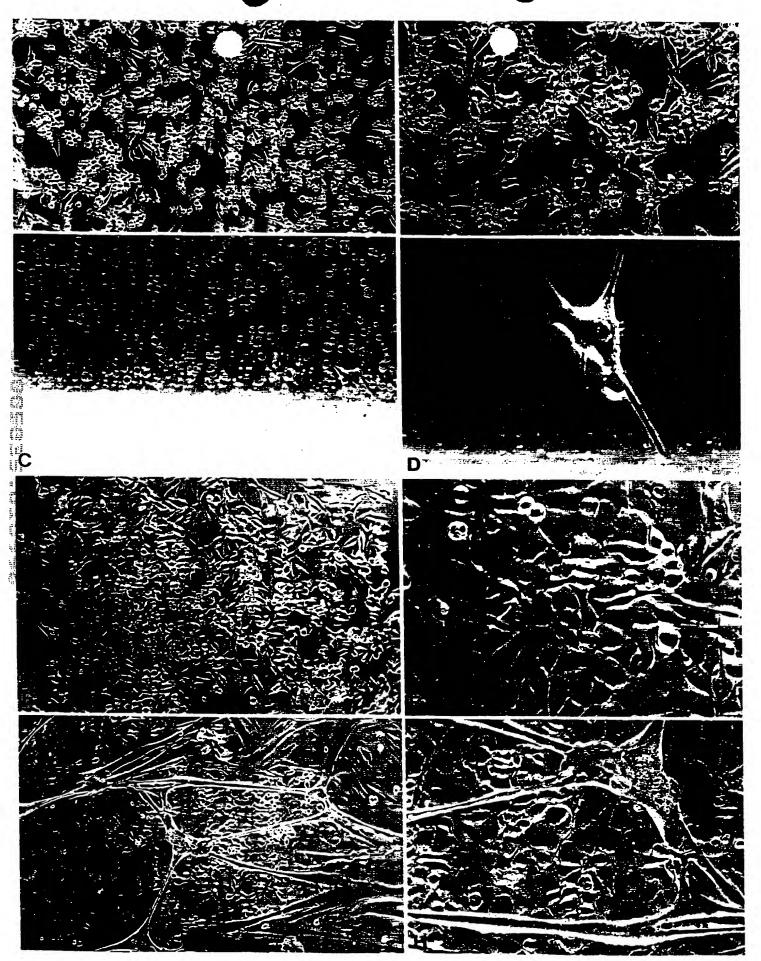


FIG.18

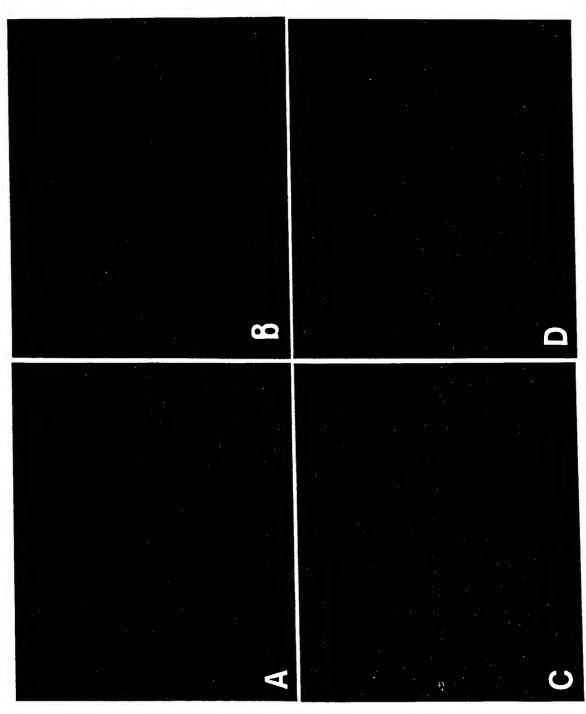
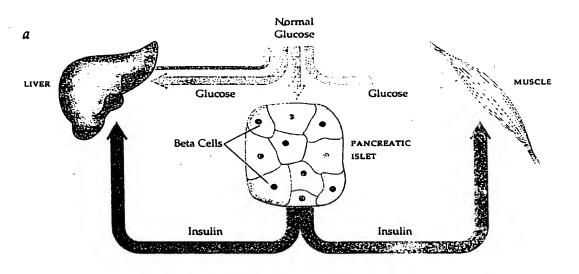
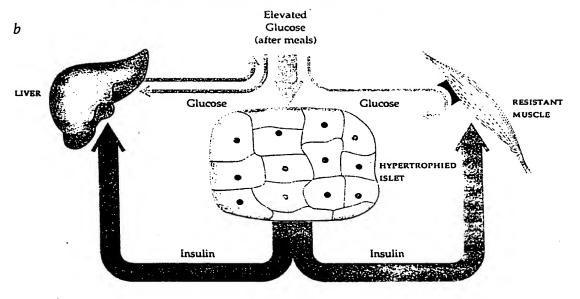


FIG.19





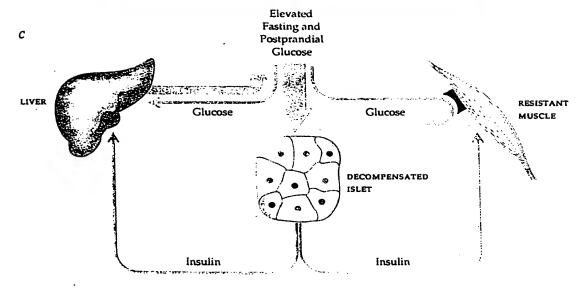


FIG. 20